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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,578	12/28/2000	Andrew Worley	875.000367 (H2596-HMD)	6501

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EXAMINER

GONZALEZ, JULIO C

ART UNIT PAPER NUMBER

2834

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/750,578	WORLEY ET AL.	
Examiner	Art Unit	
Julio C. Gonzalez	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 June 2002.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 December 2000 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11. 6) Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second hollow cylinder sealed to both end pieces disclosed in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, what is meant by the magnets having a *plurality of pieces* which in turn have a plurality of flats “against respective ones”? Against the magnets? Pieces? Flats? Also, a plurality of pieces are abutted, are these the same as the plural pieces disclosed the claim? Or are these another set of different plural pieces?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5-7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable under Kawamura in view of Mikulic.

Kawamura discloses stator 6, a rotor (see figure 1), a body of ferromagnetic material 58, spaced apart permanent magnets 53, a second cylinder 4 and end pieces sealed to second cylinder (see figure 1) and a conducting cylinder 54 (see figure 8).

However, Kawamura does not disclose explicitly having a magnetic field being induced in the stator to accelerate the rotation of the rotor.

On the other hand, Mikulic discloses for the purpose of providing a motor that operates at high speeds while maintaining high efficiency, a rotor 30 having magnets 42 and a magnetic field is induced to the stator so the rotor may be speed up (see figure 2 & column 4, lines 59-64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a motor as disclosed by Kawamura and to

modify the invention by explicitly using a magnetic field in the stator for the purpose of providing a motor that operates at high speeds while maintaining high efficiency as disclosed by Mikulic.

6. Claims 2, 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura in view of Mikulic and Yashiro.

Kawamura discloses stator 6, a rotor (see figure 1), a body of ferromagnetic material 58, spaced apart permanent magnets 53, a second cylinder 4 and end pieces sealed to second cylinder (see figure 1) and a conducting cylinder 54 (see figure 8).

However, Kawamura does not disclose explicitly having a magnetic field being induced in the stator to accelerate the rotation of the rotor.

On the other hand, Mikulic discloses for the purpose of providing a motor that operates at high speeds while maintaining high efficiency, a rotor 30 having magnets 42 and a magnetic field is induced to the stator so the rotor may be speed up (see figure 2 & column 4, lines 59-64).

However, neither Kawamura nor Mikulic disclose explicitly using conductive rings.

On the other hand, Yashiro discloses for the purpose of providing a motor that can rotate faster and last longer, conductive rings 17b.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a motor as disclosed by Kawamura and to use a magnetic field in the stator for the purpose of providing a motor that operates at high speeds while maintaining high efficiency as disclosed by Mikulic and to use conducting rings for the purpose of providing a motor that can rotate faster and last longer as disclosed by Yashiro.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura in view of Mikulic and ordinary skill in the art.

Kawamura discloses stator 6, a rotor (see figure 1), a body of ferromagnetic material 58, spaced apart permanent magnets 53, a second cylinder 4 and end pieces sealed to second cylinder (see figure 1) and a conducting cylinder 54 (see figure 8).

However, Kawamura does not disclose explicitly having a magnetic field being induced in the stator to accelerate the rotation of the rotor.

On the other hand, Mikulic discloses for the purpose of providing a motor that operates at high speeds while maintaining high efficiency, a rotor 30 having

magnets 42 and a magnetic field is induced to the stator so the rotor may be speeded up (see figure 2 & column 4, lines 59-64).

Kawamura and Mikulic disclose the claimed invention except for using copper for the conductive cylinder. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use copper, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

September 5, 2002



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